

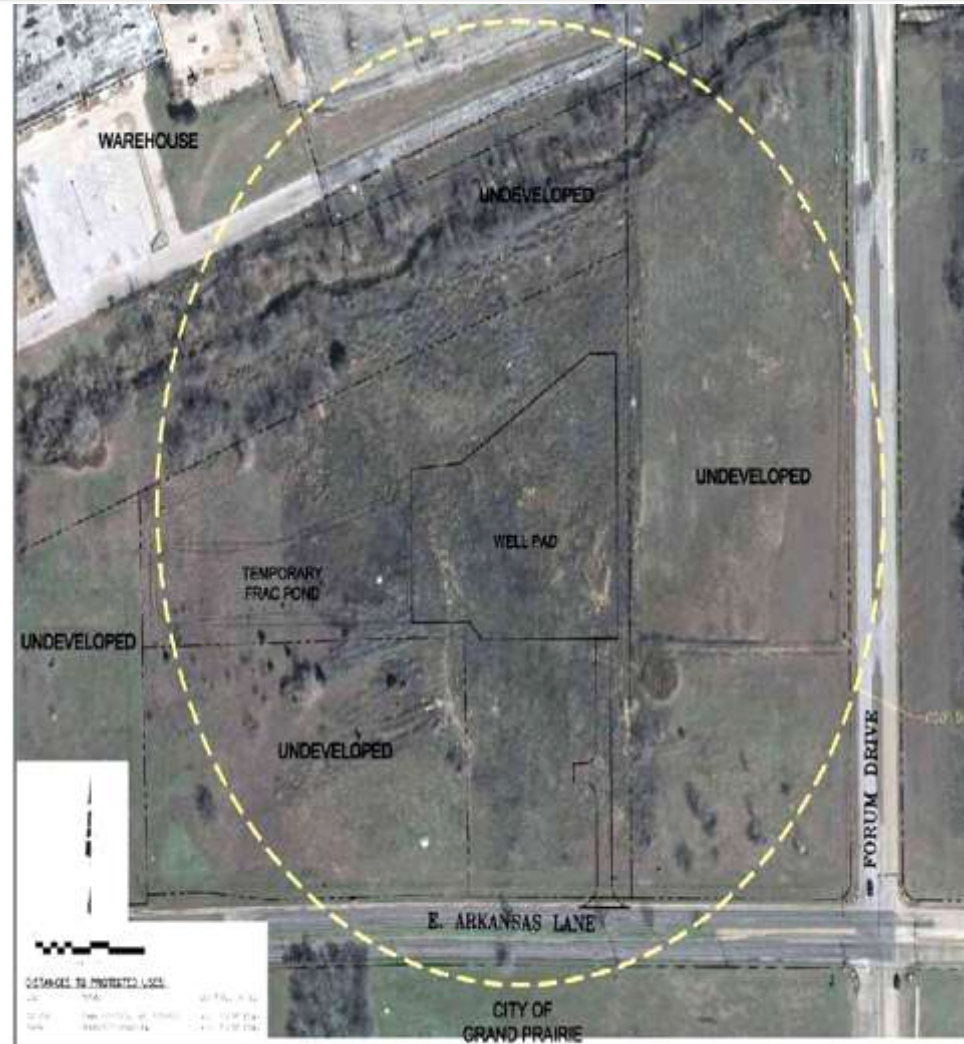
# Natural Gas Program Summary

Planning and Zoning Commission Work Session

April 7, 2010

# Site Operations

- 1) Road Damage
- 2) Transportation
- 3) Bonding
- 4) Flowback



Arkansas Drill Site

# Road Damage

- **Assess Fee Based On:**
  - Lane miles
  - Roadway type
  - Number of wells
  - Condition of roadway
- **2007 Study**
  - Based on 2004 assumptions
- **Update Analysis**
  - Per-lane assessment
  - Accurate traffic counts
  - Site ingress and egress
  - Current construction costs
- **Road Repair Agreement**
  - Tied to identified damage



# Fee Calculation

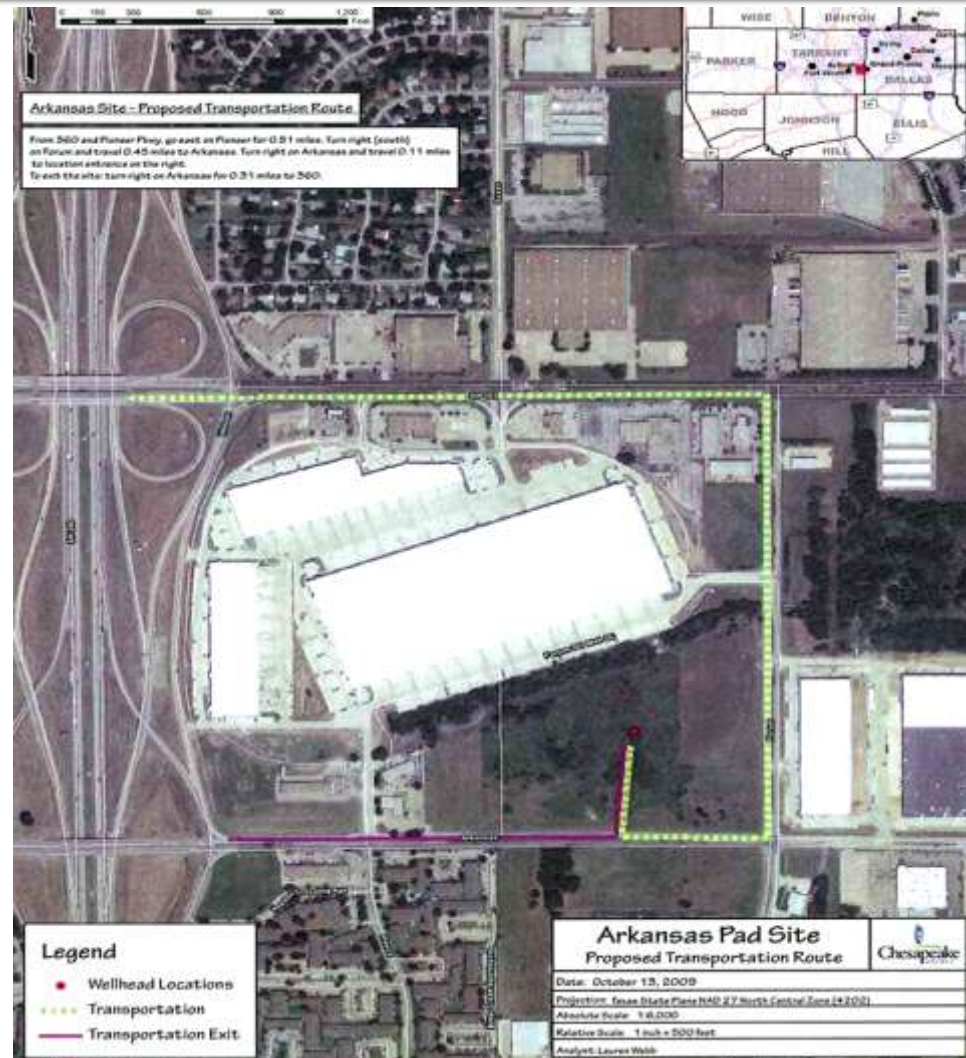
Per lane mile	Current	Example
Type I	\$1,011	\$1,076 est.
Type II	\$515	\$548 est.
Type III	\$293	\$356 est.
Type IV	\$608	\$647 est.
Type V	\$608	\$647 est.
Type VI	\$368	\$447 est.
Type VII	\$110	\$132 est.
Type VIII	\$106	\$148 est.
Type IX	\$92	\$121 est.
Type X	\$92	\$122 est.

Based on preliminary scenario of updated construction costs only and could be utilized as an interim resolution. Further study for a solution is suggested.



# Transportation

- **Traffic Route finalized during permit review**
  - Utilize identified truck routes
  - Input from impacted ISD
  - Avoid school zones
  - Time restrictions
- **Flexibility required for status changes**
  - Deteriorated roadway
  - Road construction
  - Detours
- **Follow approved route during each drilling stage**
  - Meet with Operator before each activity



# Bonding

## ➤ **Current Amounts**

- \$50,000
  - During drilling and reworking
- \$10,000
  - Producing without reworking

## ➤ **Operator costs**

- Approximate \$6 million bond
- Affects credit rating and ability to insure

## ➤ **Blanket Bond**

- Require amount per each operator in City of Arlington
- Total based on well numbers



# Flowback

- **Comes from fracing**
  - Frac water returns to surface
  - Majority of water 3 to 7 days after fracing
  - Quiet operation
- **Performed during daylight hours per Ordinance**
  - Inspector may approve nighttime operation
- **New wording**
  - Notification required
  - Nighttime flowback allowed
  - Adequate infrastructure near protected uses (tanks)



	Arlington	Fort Worth	Grand Prairie	Mansfield	Flower Mound	Grapevine
Road Damage	Fee based on mileage, road type, and assessment	Bond or letter of credit (LOC)	Road maintenance agreement; changing to upfront fee	Remediation agreement & upfront fee (min. \$5,000; max \$30,000)	Bond or LOC	Bond or LOC
Traffic Routing	Designated truck or commercial routes	Designated truck or commercial routes	Designated truck or commercial routes	Public streets	Arterials, collectors, or local commercial	Arterials, collectors, or local commercial
Bonding	Bond or LOC; \$50,000 per well, reduced to \$10,000	Bond or LOC Drilling: 150K 1-5 , +50k per >6 Production: 100k ≤ 75 150K 76-150 250K > 151	Bond or LOC, \$50,000 per well or blanket bond	\$100K per well or \$200K per site (blanket bond)	Bond or LOC; \$50,000 per well, reduced to \$10,000	Bond or LOC; \$50,000 per well, reduced to \$10,000 or blanket bond
Flow-back	Daytime hours only, nighttime if approved by inspector	Exempt from work hour restrictions	Daylight hours	Daytime and nighttime Hours	Daylight hours	Daylight hours



# Recommendations

## 1) Re-examine Road Damage Calculations

- Update figures
- Update fee totals and study long-term impact

## 2) Continue utilizing direct traffic routes

- Time restrictions during peak hours
- Administrative rerouting on second permit for identified problem routes

## 4) Blanket Bond

- Per operator for the entire City
- Tiered level based on number of wells

## 5) Allow Flowback 24/7

- Reword Ordinance
- Require notice of action before starting this stage
- Identify concerns upon receipt of notice